

What is the Purpose of the Federal Clean Air Act's Prevention of Significant Deterioration Permitting Program?

The purpose of the Prevention of Significant Deterioration (PSD) Permitting Program is to:

- prevent violations of the Clean Air Act National Ambient Air Quality Standards (NAAQS) and protect the environment;
- protect air quality and visibility in national parks, national wilderness areas and other areas of special natural, recreational, scenic, or historic value;
- allow economic growth while preserving good air quality;
- require the Best Available Control Technology (BACT) for new or modified major sources of air pollution to minimize air pollution; and
- inform the public of U.S. EPA's proposed PSD permitting decisions and allow the public to comment on these decisions.

Who is Required to Get a PSD Permit?

The PSD permitting program is a Clean Air Act permitting program for new and modified major sources of air pollution such as power plants, manufacturing facilities, and other facilities that emit air pollution. PSD applies to all pollutants that do not exceed the National Ambient Air Quality Standards (NAAQS) in an area. The NAAQS establish maximum pollution concentration levels to protect public health and welfare from harmful levels of pollutants.¹ Pollutants covered by the NAAQS are called "criteria pollutants" and include nitrogen oxides, volatile organic compounds (which are precursors to ground-level ozone), fine particulates, sulfur dioxide, carbon monoxide, and lead. PSD also applies to other "non-criteria" pollutants that do not have a NAAQS such as sulfuric acid and hydrogen sulfide.²

The PSD program applies to new air pollution sources that emit over 250 tons per year of any pollutant regulated by the program. For some types of air pollution sources, such as power plants that use steam to generate electricity, the threshold for obtaining a PSD permit for a new source is

¹For pollutants in areas where ambient pollution levels exceed EPA standards, other permitting regulations apply.

²See 40 Code of Federal Regulations section 52.21(b)(23) for a list of "non-criteria" pollutants.

100 tons per year of a PSD-regulated pollutant³. An existing source that makes a major modification must also get a PSD permit (see part 40 of the Code of Federal Regulations section 52.21).

What is Best Available Control Technology?

The Best Available Control Technology (BACT) is defined in Clean Air Act section 169. BACT is the maximum degree of air pollution reduction that is feasible. BACT is determined on a case-by-case basis considering energy, environmental, and economic impacts. BACT can include air pollution clean-up equipment, modification of the production or combustion processes to reduce air pollution (such as pollution prevention), or other practices that reduce or minimize air pollution. EPA (<http://cfpub1.epa.gov/rblc/htm/bl02.cfm>) and California (www.arb.ca.gov/bact/bact.htm) databases contain examples of BACT requirements in air permits.

³See 40 Code of Federal Regulations section 52.21(b)(1) for a list of the types of sources that have a 100 ton per year threshold. This same list determines whether fugitive emissions are included when determining whether a source is subject to the PSD program.

What is an Air Quality Impact Analysis?

An air impact quality analysis is performed to determine whether the new emissions from a proposed major stationary source or major modification will cause or contribute to a violation of any NAAQS, or exceed the maximum allowable effect on ambient air quality ("PSD Increments") under Clean Air Act section 165.

Generally, the analysis will involve (1) an assessment of existing air quality, which may include outdoor monitoring data and a tool called air quality dispersion modeling, and (2) predictions, using air pollution dispersion modeling, of ambient pollution concentrations that would result from the applicant's proposed project and future growth associated with the project.

PSD regulations provide special protection to National Parks and Wilderness areas (and other areas of special natural, scenic, recreational, or historic value) that are designated Class I areas. The Federal Land Manager, (FLM) such as the National Park Service or the U.S. Forest Service, determines the Air Quality Related Values for a Class I area, which can be used to determine if a source will have an adverse impact in a Class I area. The FLM may recommend denying a PSD permit, even in cases where the project would not violate federal air quality standards, if he or she finds that the project would have an adverse impact. The permitting authority then either denies the permit or addresses the finding and issues the permit.

What Additional Impacts Analysis is Required?

The PSD program requires an additional impacts analysis assessment of the impacts on soils, vegetation and visibility caused by increases of regulated pollutants from the source or modification under review, and from associated growth. Associated growth is industrial, commercial, and residential growth that will occur in the area due to the source.

How Can I Get More Information on the Public Involvement Process?

You can find out more about opportunities to obtain information and comment on PSD projects, and the public involvement process, from the contact for a specific project. For a list of agencies delegated authority to issue PSD permits, see www.epa.gov/region09/air/permit/permitdelegation.html. You can find information on the public process for permits processed by U.S. EPA Region 9 at: www.epa.gov/region09/air/permit/index.html.

For More Information on EPA's PSD Program:

See section 40 of the Code of Federal Regulations part 52 (www.epa.gov/nsr/actions.html) or the PSD sections of U.S. EPA's draft New Source Review Workshop Manual (www.epa.gov/nsr/publications.html).

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Permitting Program Overview



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